



Dacryocystorhinostomy (DCR)

What is dacryocystorhinostomy (DCR)?

This is an operation to form a new tear drain between your eye and nose when there has been a blockage. If the normal drainage passage gets blocked or narrow, you might get a watery eye or repeated eye infections.

How do tears normally drain away?

Tears are produced continuously and when you blink they are drawn into two small holes in the inner corner of your eyelids. Each hole is known as a punctum. There is one in each of the upper and lower eyelids. They lead into small tubes known as the canaliculi, which in turn drain into the lacrimal sac. This lies between the corner of your eye and your nose and has a duct at the bottom, which drains into your nose, the nasolacrimal duct.

Why do the passages become blocked?

The normal system does not have much spare capacity (that is why we 'cry'), and the narrow drainage channel becomes even narrower with age, especially if you have had nose or sinus disease.

What happens when I come to hospital?

You will first be seen by a nurse who will take your history, check your vision and measure the pressure in your eye. Your eye will then be examined again by an eye doctor (ophthalmologist). This will also involve tests that might include syringing water through your tear ducts to see whether there is a blockage, and a telescopic examination of the inside of your nose. After we have discussed your options and you have decided to have the operation, we will arrange a date for the operation and ask you to visit a nurse in the pre-operative assessment clinic. You might have some routine tests there to check your general health, including blood tests and an electrocardiogram (ECG). You will be advised to stop taking any medicines containing aspirin or ibuprofen two weeks before the operation. If you have been prescribed these or any anti-coagulants (drugs to thin the blood such as warfarin), please discuss this with your GP or your anti-coagulation clinic.

What does surgery involve?

During DCR, your tear drainage passages are opened so that the tears

can drain into the nose. There are two approaches to DCR surgery: external DCR and endoscopic endonasal DCR, often referred to as EndoDCR. They are similar operations with similar success rates.

External DCR

The operation takes place through a 10- 15mm incision in the side of your nose, where a pair of glasses would rest. This heals very quickly and is rarely visible when healing is complete in most people. You will have sutures (stitches), which are usually removed seven to ten days later. As part of the procedure, small polythene rods (often referred to as tubes, although they do not assist with drainage), are positioned internally to ensure that the newly made passage remains open during the healing phase. These rods are removed after four to six weeks.

Endoscopic DCR

Endoscopic DCR is a minimally invasive procedure to unblock tear ducts. The operation is very similar to external DCR, except there is no cut through the skin and no scar afterwards. Access is through your nose, using a small thin camera (endoscope). As with all DCR surgery, small rods will be placed internally in the newly created passage and these will be removed after four to six weeks.

Removal of rods

The rods will be trimmed on the ward before you leave. They might be visible just inside your nose, but don't worry if

they are not visible; they will be removed during your next outpatient appointment. They are tied inside your nose and a loop can occasionally protrude from the inner corner of your eyelids. If this happens, the soft polythene rods can gently be pushed back into place. Please call 020 7253 3411 and ask to be put through to the A&E department if you are concerned about this.

What type of anaesthetic is necessary?

The operation takes about an hour and is usually performed under a general anaesthetic where you are asleep, or sometimes under local anaesthetic with sedation. With a local anaesthetic, your nose is 'frozen' using an injection, which will sting for about half a minute. You should not feel any discomfort during the surgery but may hear a crunching sound. Do not be afraid, as this is quite normal and is less noisy than a visit to the dentist!

If you are an older patient and having a general anaesthetic in the afternoon, you might be asked to stay overnight, but most younger patients can go home later the same day. You must not drive yourself home and we advise against travelling home on public transport. We recommend you ask a friend or relative to drive you home.

What are the surgery aftercare instructions?

After your operation, try have a quiet evening at home and avoid strenuous exercise for a week. You are advised

not to drive, operate machinery, drink alcohol or take sedative drugs for 24 hours. If your eye pad has not been removed in the hospital, gently remove it in the morning at home and wash normally, taking care to dab and not rub the operation site. If you have had external DCR, it is advisable to keep your skin wound dry and uncovered. After endoscopic DCR, your doctor will usually ask you to perform nasal douching (wash-out) for several weeks using sterimar nasal spray (this is a saline spray for the nose).

After the operation, you might experience some blood stained oozing from your nose. This usually stops after a few hours. If there is bleeding, apply an ice pack to the bridge of your nose (on the opposite side to the dressing). Wipe away any bleeding with a paper tissue/kitchen towel. If the bleeding is severe or continues for more than half an hour, seek medical advice immediately at Moorfields Eye Hospital or your nearest accident and emergency department.

If you experience pain, (which is unusual), you can take paracetamol or codeine. You must not take aspirin or ibuprofen for two weeks as this could cause some bleeding. In order to avoid drugs containing aspirin, please read the contents of the packaging of whatever painkiller you wish to use. It is usual to have a watery eye for some weeks after surgery until the swelling and inflammation settles, and the rods are removed. You will also be given a letter for your GP informing them about

your operation. If you feel generally unwell, see your GP and give him or her the letter.

Is there anything else I should not do after the surgery?

Hot food and drinks should be avoided for up to 24 hours after the operation as this can trigger post-operative bleeding. You may wipe your nose or sniff to clear it, but you must not blow your nose for seven to 10 days. If you sneeze, try to keep your mouth open.

What are the main complications following a DCR?

Bleeding: A nose-bleed can occur up to 10 days after surgery. This happens to about one in 50 patients. In most cases, the bleeding will stop by itself, but if it continues or is very heavy you should attend the accident and emergency department at your nearest hospital.

Infection: This is rare, but a possible complication. When you leave the hospital, you will be given drops to use during the day to prevent infection.

Scar formation: In case of external DCR, the incision on the side of the nose is usually small but might occasionally need to be massaged.

Blockage: Rarely, a scar can form inside, leading to blockage of the drain again and requiring another operation. Sometimes, it might require surgical insertion of a small pyrex tube known as a Jones tube, which stays permanently in the tear duct.



What is the follow-up treatment?

For external DCR surgery, you will be given a clinic appointment for one or two weeks after surgery. The stitch in your skin will be removed by a nurse and the silicone rods might be removed from inside your nose at the same time or at another appointment by a nurse or a doctor (usually between four and six weeks). The nurse or doctor will then discharge you from hospital. If you have had an EndoDCR, you will be seen after six weeks for tube removal and then again after six months for a final check. You will only need to contact us if you experience any problems. If you require any further information or advice after your operation, please telephone 020 7253 3411 and ask for the ward in which you were a patient or for the accident and emergency department.

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Moorfields Direct telephone helpline

Phone: 020 7566 2345
Monday-Friday, 8.30am-9pm
Saturday, 9am-5pm
Information and advice on eye conditions and treatments from experienced ophthalmic-trained nurses.

Patient advice and liaison service (PALS)

Phone: 020 7566 2324/ 020 7566 2325
Email: moorfields.pals@nhs.net
Moorfields' PALS team provides confidential advice and support to help you with any concerns you may have about the care we provide, guiding you through the different services available at Moorfields. The PALS team can also advise you on how to make a complaint.

Your right to treatment within 18 weeks

Under the NHS constitution, all patients have the right to begin consultant-led treatment within 18 weeks of being referred by their GP. Moorfields is committed to fulfilling this right, but if you feel that we have failed to do so, please contact our patient advice and liaison service (PALS) who will be able to advise you further (see above). For more information about your rights under the NHS constitution, visit www.nhs.uk/choiceinthenhs

